

The determinants of expatriation in Japanese multinationals: vertical business groups and executive staffing policies in Asia

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THE DETERMINANTS OF EXPATRIATION IN JAPANESE MULTINATIONALS:

Vertical Business Groups and executive staffing policies in Asia*

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**THE DETERMINANTS OF EXPATRIATION IN JAPANESE
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ABSTRACT

We empirically examine the determinants of the decision whether or not to appoint an expatriate as the managing director of overseas affiliates for a sample of 844 Japanese manufacturing affiliates operating in Asia in 1995. Confirmation is found for hypotheses based on a control & coordination perspective on expatriation as well as a knowledge creation & learning perspective. Information interdependence and strategic interdependence between affiliate and parent increase the propensity to appoint expatriates, while localization of the affiliate reduces it. Organizational experience in the country, both of the affiliate and the firm, increases the probability that host country nationals are appointed. Inter-firm relationships within vertical *keiretsu* groups impact expatriation policies through inter-organizational information sharing in host countries and the mitigation of localization requirements due to intra-group transactions.

Keywords: Expatriate managers, Japanese firms, keiretsu

Running Title: Determinants of expatriation

INTRODUCTION

The question of whether an expatriate should run a firm's foreign affiliates or not has – directly or indirectly - been a topic of management research for the past twenty-five years (see, for example, Tung, 1982; Kobrin, 1988; Boyacigiller, 1990; Sohn, 1994; Banai, 1995; Wang, Wee & Koh, 1998; Downes & Thomas, 2000). Edström and Galbraith (1977) were among the first to categorize the reasons for transferring personnel abroad. In their classic *Administrative Science Quarterly* article they distinguished between three motives: i) filling positions, ii) management development and iii) organization development. Each of these motives provides different reasons for employing either parent country nationals (PCN) or host country nationals (HCN). When conceptually examining the reasons behind the expatriation decision, two strands of research appear to have developed rather independently of each other (Delios & Björkman, 2000). On the one hand there are studies that use a control and coordination framework to explain the choice between a PCN and HCN (e.g. Boyacigiller, 1990; Kumar & Seth, 1998; Wang, Wee & Koh, 1998; O'Donnell, 2000). These operate on the assumption that the parent seeks ways to align the affiliate's objectives with its own and that the use of expatriates is one way to control operations abroad. On the other hand there are studies that apply a perspective rooted in knowledge creation and learning (e.g. Downes & Thomas, 2000). These start from the premise that the organization and the expatriate are both bases of knowledge that by means of learning develop the competitive position of the organization. Both perspectives will be analyzed in this paper.

Empirical research on the determinants of executive staffing practices is still relatively scarce (Harzing, 2001). Furthermore, with the exception of Delios and Björkman (2000), the few studies that have been conducted did predominantly limit analysis to expatriation in US multinationals (Downes and Thomas, 2000) or to expatriation practices in a single firm (Boyacigiller, 1990). Given the potential impact of the top manager on the functioning of the affiliate this lack of empirical attention

seems surprising.¹

In this context, executive staffing decisions in Japanese multinational firms are an especially interesting case to examine. Japanese multinational firms make extensive use of expatriates for top management positions in their overseas affiliates (Rodgers and Wong, 1996; Belderbos 1997, 1998). A recent survey among foreign owned affiliates in Asia indicates that Japanese firms' reliance on PCNs is still continuing and substantially greater than in US and in German firms (MITI, 2000). Whereas the US and German firms predominantly rely on local executives, in more than 70 percent of Japanese affiliates the executives were Japanese expatriates.² The intensive use of expatriates in Japanese multinationals has been linked to the specific human resource management practices in Japanese firms such as life time employment systems, extensive job transfer systems, seniority based pay, and an emphasis on control through socialization (McMillan, 1996; Tung, 1984; Beechler and Yang, 1994; Jaeger and Baliga, 1985), and the tacit nature of knowledge and best practice transfer in Japanese firms such as total quality control systems and JIT procedures (e.g. Wilkinson et al, 1994; Rodgers and Wong, 1996). It is also a corollary of the exceptionally low failure rate of Japanese expatriate assignments (Briscoe 1995, Peterson et al, 1996). On the other hand, it has been pointed out that this form of ethnocentric staffing policy has its drawbacks, such as creating a ceiling for the promotion of host country managers and increasing turnover among talented host country employees (e.g. Negandhi et al, 1985; Banai, 1995; Tung, 1984, Beamish and Inkpen, 1998). Moreover, it has been suggested that this organizational practice is also rooted in negative perceptions of foreign nationals among Japanese managers and therefore difficult to change even if management of overseas affiliates would be more effective through the appointment of host country nationals in managerial positions (Banai, 1995). In this paper, we examine to what extent decisions on expatriate appointments by Japanese firms are explained by firm and affiliate characteristics in a way predicted by perceived theories of expatriation, rather than being an artifact of organizational inertia.³

¹ See Finkelstein and Hambrick (1996) for an overview of the impact of top management on the functioning of the organization.

² The reported percentage in a study by Harzing (2001) was only somewhat lower (62,5%).

³ In this sense, we follow Beechler and Yang (1996) by framing our working hypotheses in the tradition of the 'HRM fit school' or contingency approach to the transfer of Japanese HRM practices: Japanese HRM practices

A major institutional characteristic of Japanese firms affecting human resource management practices is the importance of inter-firm ties within vertical Japanese industrial groups or vertical *keiretsu*. Vertical keiretsu are networks of suppliers, related or spin-off manufacturers, and wholesale and retail distributors grouped around major large-scale assembly manufacturers such as Toyota in the car industry, or Hitachi and Matsushita in the electronics industry. A characteristic of vertical groups is that the leading or 'core' firm exerts a degree of management control over other member firms, facilitated by shareholdings, financial ties (intra-group loans) and the dispatch of managers (e.g. Belderbos, 1997; Gerlach, 1992, Goto, 1982). A particular feature of vertical groups is that the internal labor market of the 'core' firm and job transfer systems extend to other group firms: managers of the core firm are on a regular basis dispatched to group firms (Odagiri, 1992). Previous studies on internationalization and keiretsu ties have shown that existing group ties are to an important extent replicated abroad (Martin et al 1995, 1998). Keiretsu group linkages have been found to influence the decision to set up manufacturing plants abroad (Belderbos and Sleuwaegen, 1996), the location of such foreign manufacturing investments (Head et al 1995, Belderbos and Carree, 2002), and procurement practices of overseas affiliates (Belderbos et al, 2001). In this paper we examine whether ties to vertical business groups and group characteristics abroad also influence human resource management practices and the decision to use expatriates or local managers for executive positions.

Summarizing, the contribution of this paper is threefold. First, we apply an integrated framework based on a control and coordination as well as a knowledge creation perspective to analyze executive staffing decisions. Specifically, we focus on the determinants of the decision to appoint an expatriate parent country national (PCN) or a host country national (HCN) as the managing director of foreign manufacturing affiliates. Second, we contribute an empirical analysis of expatriation in a large sample of Japanese multinational firms, using a unique dataset on 844 Japanese manufacturing affiliates in eight different Asian countries. Third, our analysis not only examines the influence of the

will be transferred abroad to a foreign affiliate or adapted to local conditions depending on the environment and strategic positioning of the affiliate.

parent firm, the affiliate, and environmental characteristics on expatriate appointments, but also the role of inter-organizational interdependence within Japanese vertical business groups, or keiretsu.⁴

The remainder of this paper is organized as follows. The next section provides further detail on the background to Japanese human resource management practices and the role of vertical business groups. The paper then discusses the two theoretical perspectives on expatriation and develops hypotheses based on these views and the specific setting in which Japanese firms operate. Section four discusses the methodology and describes characteristics of the dataset and the operational measures. In section five the results are presented and the final section provides a discussion of these results and offers recommendations for future research.

HRM AND EXPATRIATION IN JAPANESE FIRMS

In this section we review the literature on Japanese HRM and expatriation practices and the potential role of inter-firm linkages in business groups. Japanese (human resource) management practices have been described as centering around a number of core concepts: articulated management philosophy, corporate culture and a trust based internal labor market (e.g. McMillan, 1996, Beechler and Yang, 1996; Odagiri, 1992). This internal labor market involves careful selection of managerial candidates, life time employment systems, seniority based pay, frequent job rotation of career workers and managers, and substantial investments in employee training. This system of management and organization, with strong lateral communication between managers of different business units and functional departments allows for an important emphasis on cultural control in the management of domestic and overseas operations (Baliga and Jaeger, 1985; Ouchi, 1980). Cultural control systems imply that output is controlled by shared norms, that behavior is guided by the shared philosophy of management, and that performance is not necessarily imposed by an external control system since employees and managers see this as a social obligation (Jaeger and Baliga, 1985; Ouchi, 1980). These

4 Although Boyacigiller (1990) suggested that such inter-company linkages should be taken into account in future research, this issue has not yet received due attention.

company specific control systems are partly rooted in Japanese culture emphasizing trust, loyalty, and group identification. Since cultural and language barriers impose important obstacles to the transfer of such control systems abroad and to the involvement of host country nationals, Japanese firms have relied on expatriates to manage foreign affiliates and to serve as a conduit between headquarters and the local organization. The specific traits of Japanese management and organizational practices also form the basis of the extraordinary success of expatriate assignments by Japanese multinational firms. Compared to US and European multinational firms, Japanese firms excel in careful selection of expatriates, pre-assignment training and preparation, more intensive support from headquarters during the assignment, allowing longer assignments and time to learn, and careful career management and repatriation policies (Peterson et al, 1996; Tung, 1984).

Another particular feature of Japanese management and organization that influences HRM policies in particular for career managers is the intensive inter-organizational linkages within vertically organized industrial groups centered around major manufacturers such as Hitachi, or Toyota (e.g. Goto, 1982, Belderbos, 1997; Gerlach, 1992).⁵ Dependent firms in the group in most cases have an intensive trading relationship (either as a supplier or as a client) with the core manufacturer and may be partly owned or financed by the core firm.⁶ The most important feature of this organization involving HRM practices is that the internal labor market extends to group members in vertical groups. Part of the job rotation schemes of managerial workers involves posts at suppliers or other group firms. Through posting of managers, the core firm maintains a level of control over the group firms, often complemented by (minority) equity stakes and loans. Such managerial postings foster intra-group inter-firm communication, aiding joint development programs for new products, coordination on just in time delivery systems and other processes necessitating inter-organizational information exchange. Sako (1999) argues that intra-group job rotation schemes should be seen as a

⁵ A second major category of business groups, horizontal keiretsu, are large bank-centered and trading firm-centered diversified groups of basically independent firms (Nakatani, 1984; Goto, 1982). Here group firms are not an extension of internal labor markets and there is no evidence of group influences on HRM practices. We abstract from horizontal groups in this paper.

⁶ This organization is also the result of a 'hive off' strategy by large industrial firms, establishing individual divisions into separate firms. For instance, Nippondenso one of the largest car component manufacturers in the

means to diffuse skills and tacit knowledge of managers and employees, which would otherwise be hard to transfer through market mechanisms. Odagiri (1992) notes that transfer of managers to group firms is a common practice in large Japanese firms leading vertical business groups. Statistics show that among large Japanese firms, 90 percent had employees working in other companies, while on average 17 percent of managers of large firms were transferred to other firms. Sako (1996) finds that up to 25 member firms in the Toyota group have employees formerly working for Toyota on the board of directors. To the extent that this system of managerial postings across groups firms is replicated and/or adapted abroad, this form of inter-firm interdependence is also likely to influence overseas HRM practices and expatriate assignment decisions.

Empirical work on the transfer of Japanese management and organizational practices has mainly focused on the transfer of Japanese organizational 'best' practices for manufacturing such as Just In Time delivery systems, total quality control systems, flexible equipment retooling, and HRM practices such as enterprise unions, team work, open job descriptions, etc. The results paint a mixed picture. Nohria and Rozenzweig (1994) find that HRM practices (such as training, working times, participation in decision making) in US affiliates of Japanese firms are significantly less localized than such practices in EU and Canadian firms' affiliates. Analysis revealed that the presence of expatriates reduced the degree of localization. Rodgers and Wong (1996) find that the transfer of Japanese organizational practices such as quality control and responsiveness to production problems enhances the performance of affiliates and that such transfer is facilitated by the presence of expatriate managers in Singaporean affiliates. Specific HRM practices such as seniority based pay and enterprise based unions on the other hand, were generally not transferred. Beechler and Yang (1996) in a case study of five Japanese affiliates in the US, find that the transfer of HRM practices is positively dependent on the strategic importance of the affiliate and argue that the HRM practices adopted will be based on the fit with the environment and strategic role, as suggested by Boyacigiller (1990). Delios and Björkman (2000) is the only study focusing on expatriate staffing policies in Japanese subsidiaries abroad. They analyze differences in the total number of expatriates employed in Japanese subsidiaries, rather than world, was originally spun off from Toyota (Odagiri, 1992). Toyota maintains a minority share holding in the

expatriation policies for managing directors, and focus on comparing affiliates in China (PRC) and the United States. They find that the use of expatriation differed in these two countries, with higher expatriate use in China than in the United States. Affiliate and parent characteristic also impact the number of expatriates, with greater ownership stakes and larger size of the affiliates leading to more expatriation, but with lower expatriation levels observed for firms with greater international operations.⁷

In this paper we follow the contingency approach in analyzing the decisions to appoint expatriates to the position of managing director of Japanese affiliates abroad. Although the particular characteristics of Japanese HRM practices explain the general higher propensity to appoint expatriates as managing directors of overseas affiliates, they do not explain the instances that firms do appoint host country nationals to head overseas operations. Our contention is that the expatriation decision differs systematically across firms and affiliates depending on their characteristics. The nature of these systematic relationships follows from received theories and perspectives on expatriation, but is also affected by inter-firm relationships within business groups that are a more particular trait of Japanese firms.

ALTERNATIVE APPROACHES TO EXPATRIATION

In this section we develop hypotheses concerning the factors determining expatriate appointments for managing directors in overseas affiliates from a control and coordination perspective as well as in the context of a knowledge and learning framework. Furthermore, the influence of inter-firm ties within vertical Japanese industrial groups is discussed.

firm.

⁷ Mixed results were obtained for the impact of subsidiary age and the role of previous experience of the parent firm in the country.

A control and coordination perspective on expatriation

From a control and coordination perspective, the appointment of a PCN managing director to an affiliate helps ensure that the way the affiliate is managed is in line with the interest of the parent company (Geringer & Frayne, 1990; Wang, Wee & Koh, 1998). The PCN is in this case used to fill a position (Edström & Galbraith, 1977 and 1994). The PCN can thus either be considered as a means of headquarters supervision or as a mechanism of social control (O'Donnell, 2000). The most important theories within the control and coordination perspective providing explanations for the use of expatriate top managers are agency theory, structural contingency theory and the resource dependency perspective (Kumar & Seth, 1998).

Structural contingency theory looks at the expatriate staffing decisions from an information processing perspective (Boyacigiller, 1990; and Kumar & Seth, 1998). In this view the affiliate and the parent are both part of the same information processing network, implying that the type of coordination and control varies with the required information processing. If the information needs of the affiliate and the parent are independent of each other, the assignment of a PCN seems redundant. If, however, the sharing of information between affiliate and parent is necessary for successful functioning, the assignment of a PCN to facilitate this interdependent information flow seems more likely (Killing, 1983). This generates a first hypothesis.

Hypothesis 1: As the information interdependence between affiliate and parent increases, the likelihood that a PCN will be assigned as managing director of the affiliate will increase.

Agency theory defines the choice between the assignment of a PCN or a HCN as the trade-off between the cost for headquarters of monitoring the behavior of the affiliate by using a PCN versus the cost of measuring outcomes and transferring risk to the affiliate by assigning a HCN (Eisenhardt, 1985). The determinants of this choice can be found in the level of goal incongruence and information asymmetry between parent and affiliate (Kren & Liao, 1988; and Zajac, 1990). The assignment of a PCN to directly supervise foreign operations reduces goal incongruence and information asymmetry to

a certain extent. When, however, operations of the affiliate become too specialized and thus the information required to monitor too extensive (and too costly), direct supervision as a control mechanism needs to be substituted by measuring outputs. Decentralization of decision-making occurs and the affiliate is granted more discretion with respect to dealing with the local market (Egeloff, 1988). This makes the assignment of a HCN as managing director more appropriate. This is summarized in hypothesis 2.

Hypothesis 2: As the local orientation of the affiliate increases, the likelihood that a PCN will be assigned as managing director of the affiliate will decrease.

The resource dependence perspective, finally, looks at expatriate staffing in terms of a parental mechanism to gain influence or power over the critical resources of the affiliate (Pfeffer & Salancik, 1978). The central question in this approach is how dependent the parent is on the resources of the affiliate to execute its own strategy successfully. The more the parent depends on these resources, the more careful it will manage this relationship and the larger the likelihood that a PCN is assigned as managing director of the affiliate. This leads to the third hypothesis.

Hypothesis 3: As the strategic interdependence between affiliate and parent increases, the likelihood that a PCN will be assigned as managing director of the affiliate will increase.

A knowledge creation and learning perspective on expatriation

From a perspective of knowledge creation and learning the objective of the parent when assigning a PCN as managing director is to develop managers by means of foreign experience or- even one step further - to develop the organization so that a knowledge network is created through expatriation (Edström & Galbraith, 1977 and 1994; Scullion, 1991; and Bonache & Cervino, 1997). The importance of such a perspective for the achievement of a sustainable competitive advantage, has

received a lot of recent research attention (Dyer & Nobeoka, 2000). The organization is viewed as a knowledge base in which knowledge is created, stored and applied (Conner & Prahalad, 1996; and Grant, 1996). The role of the PCN then becomes to act as a depot of knowledge, which enables the transfer of intellectual capital between the different affiliates and the parent (Bird, 1996). Specifically, two flows of knowledge can be distinguished. There is a flow of organization-specific knowledge from the parent to the affiliate and there is a flow of market- or country-specific knowledge flowing from the affiliate back to the parent. To what extent knowledge transfer and learning actually takes places depends on the absorptive capacity of both the parent and the affiliate. Absorptive capacity is defined as the ability to “recognize the value of new information, assimilate it, and apply it to commercial ends” (Cohen & Levinthal, 1990:128). This capacity is influenced by the extent of related prior knowledge and the extent to which parent and affiliate are similar with respect to certain attributes (Gupta & Govindarajan, 2000). In this reasoning knowledge creation benefits most when parent and affiliate share a similar frame of reference. This bears strong resemblance to the findings with respect to increased learning when firms have similar prior knowledge, compatible norms and values and similar operational priorities or ‘dominant logic’ (Bettis & Prahalad, 1995; Lane, Salk and Lyles, 2001). The implication is that when the affiliate has no experience in working with the parent firm and is thus not familiar with the existing corporate routines of the parent, interaction at the level of the individual becomes necessary to permit the transfer, recombination, and creation of knowledge (Grant, 1996). The assignment of a PCN then facilitates the creation of the necessary common frame of reference. On the other hand, when previous experience in the country has been obtained, the organization has had the opportunity to learn from these experiences and develop organizational routines and to develop an existing body of social knowledge (Sohn, 1994; Downes & Thomas, 2000; Delios and Björkman, 2000). This makes the assignment of a PCN as a means of knowledge transfer, in particular the transfer of market specific knowledge flowing from the affiliate to the parent, less necessary. This generates the following two hypotheses.

Hypothesis 4: The greater the affiliate's experience in cooperating with the parent firm, the lower the likelihood that a PCN will be assigned as managing director of the affiliate.

Hypothesis 5: The greater the prior experience of the parent in the country, the lower the likelihood that a PCN will be assigned as managing director of the affiliate.

Expatriation and the role of inter-firm ties within a vertical keiretsu

Inter-organizational ties within vertical business groups and the characteristics of those groups can influence expatriate appointment policies in several ways. First, a large network of operations established by other group firms in a host country promotes sharing of relevant country-specific information and lateral rather than vertical information exchange (Belderbos & Sleuwaegen, 1996; Martin et al, 1998). According to the information processing view in the control and coordination perspective on expatriation, the information interdependence of the parent and the affiliate decreases, making the appointment of a PCN as managing director less necessary. Furthermore, in line with the knowledge creation and learning perspective, the presence of a large number of group affiliates will be associated with the existence of a group-wide knowledge base with market- and country specific knowledge, reducing the benefits of PCN appointments. Third, a larger network of group affiliates in the country may allow affiliates to draw from a larger pool of local HCN managers with relevant management experience and skills, both through intra-group transfers of managers and through management training programs sponsored by the 'core' firms.⁸ Group firms are likely to benefit from such training systems if their HCN managers take part in the schemes and benefit from intra-group management transfer practices if these are replicated abroad through the transfer of HCN managers possessing organizational skills and experience from 'core' firm affiliates to other group affiliates in the country. This relatively greater availability of HCN managers with the required skills and

experience reduces the likelihood that a PCN will be assigned. These considerations lead to the following hypothesis:

Hypothesis 6: As the size of the manufacturing network of the keiretsu in the country increases, the likelihood that a PCN will be assigned as managing director of the affiliate decreases.

A contrasting aspect of the role of local keiretsu affiliate networks is that keiretsu firms replicate existing supplier and distribution relationships in the host country, reducing the exposure to the host country environment (Martin et al, 1995; 1998, Belderbos et al, 2001). The larger the network, the more likely it is that procurement and sales transactions occur within the network as a replication of supplier and client relationships in Japan. In case the vertical group has established a large interrelated network of affiliates in a host country, a local orientation implies that local relationships are predominantly with other firms in the keiretsu network and not with local firms. The consequence is that there will be a reduced genuine localization and reduced emphasis on output control, as well as greater intra-group informational dependence, increasing the need to assign a PCN as managing director.

Hypothesis 7: As the local orientation of the affiliate is predominantly geared towards intra-keiretsu sales, the likelihood that a PCN will be assigned as managing director of the affiliate will increase.

⁸ For instance, Toyota recently started such a formal training program for its foreign management executives. See "Global Executives Wanted at Toyota", Nikkei Weekly, 13 October 2000.

DATA AND METHODS

Data collection and sample

Our dataset draws on a detailed and complete list of Japanese manufacturing affiliates in Asia in the broadly defined electronics industry compiled by Denshi Keizai Kenkyujo in Tokyo and published as *Asia Shinshutsu Denshi Maker* (Electronics Manufacturing Firms in Asia). This is an authoritative source on Japanese foreign investments in Asia with complete coverage of investments by both large and small and medium sized firms. The data source covers 1129 manufacturing affiliates set up by 438 Japanese parent firms operational in 1995 in nine Asian countries (South Korea, Taiwan, China, Hong Kong, Singapore, Indonesia, Philippines, Malaysia, and Thailand). The investments give a reliable picture of both leading electronics firms and smaller group-related or unrelated suppliers along the value chain of the electronics industry. The restriction of the analysis to one industry, while potentially limiting the generalizability of the results, allows us to focus accurately on parent and affiliate characteristics impacting expatriation policies while abstracting from influences across industries. The database contains information on the affiliates' paid-in capital, number of employees, the managing director, name and equity stake of the Japanese investor, direction of sales, and products manufactured. We limited analysis to those affiliates for which complete information was available on the dependent and independent variables. In particular, the percentage of sales destined for the local or Japanese market was not always reported. In total 844 affiliates could be included in the empirical analysis.⁹ The 844 affiliates include 303 affiliates established by the large industrial *keiretsu* groups in the electronics industry such as Matsushita, Sanyo, Toshiba, Fujitsu, Hitachi, NEC, Mitsubishi Electric, and the Seiko group. Of these, 193 were set up by the 'core' firm of the group while the others were established by related firms within the group. In 69,5 percent of the affiliates (587 cases), the managing director was an expatriate parent country national.

⁹ The distribution over countries for the 884 affiliates sample was similar to that of the full sample, neither did averages for other variables significantly differ, such that sample selection bias is not expected to affect the empirical results.

Operational measures

The dependent variable, expatriate managing director, is a binary variable taking the value one if the managing director of the affiliate is a parent country national, and zero otherwise.¹⁰ *Information interdependence* is measured by the affiliate's share of exports back to Japan in total sales. When the affiliate exports back to Japan, the parent company has to provide feedback information on technical requirements, required quality levels and marketing conditions. Knowledge of product specifications, distribution systems, and clients are crucial to penetrate the Japanese market successfully and the parent can play a major role in providing this through exchange of information with the affiliate. The ability of the parent to provide this information and therewith the intensity of information exchange will depend on its marketing capabilities and distribution network in Japan.¹¹ Although we cannot directly measure the role of the parent firms investments in marketing and distribution, the capability to fund these investments are closely correlated with firm size. Hence, we expect small and medium size firms (SMEs), defined as firms with less than 500 employees in Japan to be less able to provide crucial information to overseas affiliates than larger firms. We therefore include sales to Japan separately for SMEs and for non-SMEs and expect a larger positive impact of the latter on expatriate appointments. *Local orientation* of the affiliate is measured in terms of share of affiliate sales destined for the local (host country) market. If an affiliate produces for local customers only, knowledge of the local market becomes far more important than when the affiliate's customers are predominantly international. A local sales orientation implies a higher degree of localization and intensive interaction with the host country, pushing for the appointment of host country nationals to managerial positions.¹² *Experience* of the affiliate in cooperating with the parent firm is captured by the number of years that the affiliate has been in operation since startup until 1995, or in case of acquisitions, the number of

¹⁰ We could not identify third country national appointments as a third type of executive staffing policy. Such appointments, however, are almost non-existent in Japanese multinationals. Tung (1982) reports no third country national appointments while Peterson et al (1996) reported very limited use of this type of staffing policies in their respective samples of Japanese multinationals.

¹¹ The role of parent firm operations is demonstrated by the fact that a dominant share of Japanese electronics affiliates back to Japan are intra-firm sales (MITI, 1997).

¹² The close integration between Hong Kong affiliates and manufacturing affiliate operations in Guangdong (PRC) often blurs the distinction between Hong Kong and PRC sales and makes 'local' sales often more difficult to determine than the sum of Hong Kong and PRC sales. We therefore treated sales in China and Hong Kong both as local for Hong Kong and China affiliates.

years since the Japanese firm acquired a stake in the affiliate.¹³ *Country experience of parent* is measured by the number of years that other affiliates of the parent had been operating in the specific country prior to the establishment of the affiliate. Both experience variables are hypothesized to have a negative sign. *Strategic interdependence* is measured by two operational variables: the equity position of the parent and the relative size of the affiliate. The equity position of the parent represents the commitment of resources from the parent to the affiliate. The higher the equity position, the more resource commitment, the more strategic interdependence (Blodgett, 1991; and Torbiörn, 1994). An additional dimension of strategic interdependence, once controlled for equity stake, is the relative size of the affiliate. The greater this relative size, the greater the influence of affiliate performance on the performance of the firm and the greater the strategic importance of the affiliate.¹⁴ Relative size is measured as the ratio of the number of employees of the affiliate over the number of employees of the parent firm. We expect separate positive impacts of both variables.

The size of the local keiretsu network is measured as the number of affiliates operated by firms in the same vertical keiretsu in the country of establishment of the affiliate. A negative impact on PCN appointments is expected. The second keiretsu variable moderates the earlier hypothesized effect of localization (local sales) on the appointment of PCNs. For keiretsu affiliates that are part of a large network of manufacturing plants set up by group firms in the country, local sales are more likely to be intra-group rather than to local firms and distributors. The primary purpose of investments in manufacturing networks is often to replicate existing intra-group supplier-customer relationships abroad, leading to strong keiretsu plant agglomerations in host economies and intra-group sales and

¹³ The database contains information on the year of investment (the year the parent acquired the affiliate in case of acquisitions), allowing us to measure the effective years of affiliate-parent operating experience. The data do not allow us to further identify which affiliates were acquired, but in practice Japanese acquisitions in the Asian electronics industry are very rare. Belderbos et al. (2001) only find 3 cases of acquisitions in a sample of 190 Japanese electronics affiliates in Asia drawn from a survey by the Japanese Ministry of International Trade and Industry (MITI).

¹⁴ We treat these different dimensions of strategic interdependence as potentially having separate additive impacts on expatriation policies, rather than extracting a principal component. The correlation between the two variables is slightly negative due to the fact that smaller equity stakes are more common in large overseas affiliates and in affiliates of SMEs with fewer financial resources. Our specification test whether, given the equity position, relative size has an additional impact.

procurement patterns.¹⁵ The implication is that a local sales orientation requires limited localization by keiretsu firms, such that for keiretsu firms local sales is expected to have a smaller negative effect on the appointment of PCNs compared to independent firms. We include the interaction effect of the number of keiretsu affiliates in the country and the local sales ratio to test this influence and expect a positive impact on expatriate appointments.

In addition to the above operational measures, we include as control variables eight country dummies (with Thailand as the reference country). A number of country specific factors are likely to impact on the decision to appoint a PCN or HCN: the availability of local experienced managers, the wages of such managers relative to those of expatriate Japanese, the cultural distance from Japan, and formal regulations or informal government pressure to promote host country nationals to managerial positions (Boyacigiller, 1990). A description and summary statistics of the dependent and explanatory variables are provided in Table 1 and the appendix contains a table with correlation coefficients.

INSERT TABLE 1

Statistical method

Since the dependent variable, expatriate (PCN) managing director, is binary, an appropriate econometric specification is the logit model, which relates the probability of expatriate assignment to a set of explanatory variables X :

$$(1) \quad \text{Prob}(PCN = 1) = \frac{\exp(\alpha + \beta X)}{1 + \exp(\alpha + \beta X)}$$

¹⁵ E.g. Belderbos and Carree (2002), Martin et al (1995, 1998). Similarly, Belderbos et al (2001) find evidence of high intra-keiretsu procurement of parts and components in host countries with agglomerations of Japanese manufacturing plants.

RESULTS

We present the results of the logit model explaining of the decision to assign a PCN as managing director to overseas affiliates in Table 2. Overall the empirical model performs well: it is highly significant with a pseudo R-square of 0.32, which is quite respectable for logit models. The percentage of correct predictions is 66 percent if sample probability threshold levels of 0.305 (HCN) and 0.695 (PCN) are used (i.e. if a ‘correct’ prediction is defined as a predicted probability greater than the sample probability). Furthermore, all significant coefficients have the hypothesized sign.

Hypothesis 1, predicting a positive relationship between information interdependence and the assignment of a PCN, is partly confirmed. Sales to Japan as an indicator of information interdependence has a positive and significant impact on PCN appointments in larger Japanese parent firms. For SMEs (firms with fewer than 500 employees) this is not the case: sales to Japan has a negative sign but is not significantly different from zero. Firms with larger operations in Japan including larger scale distribution and marketing activities are likely to provide extensive information on specifications and quality levels to Asian affiliates, and this information interdependence is better facilitate through expatriate directors. Affiliates of SMEs, on the other hand, are less dependent on information coming from headquarters.¹⁶ Hypothesis 2 is confirmed by a negative and significant impact of the local sales ratio (localization) on PCN appointments. Hypotheses 3 and 4, predicting negative impacts of operating experience of the affiliate and previous operating experience of the parent in the country on PCN appointments, are both confirmed by the negative and significant coefficients of affiliate experience and parent previous country experience. This provides strong confirmation of the knowledge perspective on expatriation. The positive relationship between strategic interdependence and the assignment of a PCN (Hypothesis 5) also finds support in the results. The equity stake of the parent is positive and strongly significant, while the relative size of the affiliate has an additional positive impact, with the coefficient significant at the 10 percent level (Note that we

¹⁶ An alternative specification with the interaction effect of employees in Japan and the sales to Japan ratio was similarly positive and significant at the 10 percent level.

use conservative two-tailed significance tests throughout. Hypothesis 6, predicting a negative relationship between the number of firms belonging to the keiretsu group in the country and the assignment of a PCN, is supported by the negative and significant impact of the keiretsu affiliate count. The interaction effect of the keiretsu affiliate count and the local sales ratio, on the other hand, is positive and significant. This confirms hypothesis 7 predicting a positive moderating impact of the size of the keiretsu network in the country on the effect of the local sales ratio. The estimated coefficients imply that with the presence of more than four keiretsu affiliates the positive local sales effect is absent, suggesting a relatively strong difference in the importance of localization for keiretsu and non-keiretsu firms. On the other hand, even for keiretsu affiliates with only local sales, the total effect of an increase in the number of keiretsu group plants remains negative, indicating that 'local vertical keiretsu networks on the whole facilitate the appointment of HCN to management positions.

The estimated coefficients for the country dummy variables show that affiliates in South Korea, Taiwan, and China (PRC) have a significantly lower probability of an expatriate managing director than the reference country Thailand. In South Korea and Taiwan the availability of experienced local managers in the electronics industry will facilitate HCN appointments. Another factor of potential importance is the fact that Japan also has historical economic relationships and past colonial ties with Taiwan and South Korea, making local business and managers more familiar with Japanese language and business practices.¹⁷ In China, intense price competition from other multinationals and local Chinese firms combined with the high additional cost of sending in expatriates has put strong pressure on Japanese firms to localize management.¹⁸

¹⁷ In addition, North East China has once been a colony of Japan (Manchuria). Belderbos and Carree (2002) find a relatively strong agglomeration of Japanese affiliates in this part of China, in particular the Dalian area.

¹⁸ E.g. "Japan firms slow to promote locals", *Nikkei Weekly*, 25 March 2002.

DISCUSSION AND CONCLUSION

This paper analyzed the determinants of expatriate appointments to the post of managing director of overseas manufacturing affiliates for a sample of 844 Japanese electronics affiliates in nine Asian countries. It developed hypotheses on the impact of characteristics of parent firms and affiliates based on two broad perspectives on expatriation identified in the literature: a control and coordination perspective, and a knowledge creation and learning framework. From a control & coordination perspective, the empirical results of a logit model explaining the appointment of expatriates as managing directors of overseas affiliates confirmed that expatriate appointments are more often chosen if the affiliate is less localized, more dependent on information from Japan, and of greater strategic importance to the investing firm. From a knowledge creation perspective, greater experience both at the affiliate level and by the parent at the country level was found to facilitate more host country national appointments to the post of managing director. These results suggest that the two perspectives on expatriation play a complementary role in explaining expatriation decisions.

Our analysis took into account a specific characteristic of Japanese firm organization and management: the importance of inter-firm ties within vertical business groups (*keiretsu*) centred around large electronics manufacturers such as Matsushita, Toshiba, and Hitachi. The empirical results suggest that both intra-group supplier-client relationships as well as practices of information exchange and intra-group managerial postings are transferred abroad once the group has build up a critical presence in the host country. On the one hand, a greater group presence in the host country facilitates host country national appointments to the post of managing director, which may be due to intra-group exchange of information and experiences, as well as group wide training programs for local managers. On the other hand, a strong reliance on intra-group sales transactions in the host country mitigates localization requirements for group firms and hence makes expatriate appointments more attractive. The former effect is stronger than the latter, indicating that vertical keiretsu networks on the whole facilitate the appointment of local managers to the position of managing director.

Overall the results confirm that Japanese firms do not simply follow an ethnocentric approach to overseas managerial appointment decisions and the transfer of Japanese HRM practices, but rather a contingency approach (cf. Beechler and Yang, 1996; Delios and Björkman, 2002): Japanese firms adapt expatriation policies depending on the strategic role of the affiliate, the type of information flows, the experience of the parent firm, as well as the nature of inter-firm ties in vertical business groups. The results for affiliate and country experience may indicate that the particular reliance of Japanese firms on expatriate managers could reduce over time as Japanese multinational firms gain more international experience.¹⁹ However, the question is whether such a reliance on gradual organizational development is enough, given the degree of ‘catching up’ that Japanese firms need to do in reducing reliance on expatriate managers (MITI, 2000), and the greater need to access local talent to fill overseas managerial positions for firms with rapidly growing affiliate networks. In particular in China, reports and surveys indicate that the reliance by Japanese firms on expatriates negatively impacts competitiveness of their operations by increasing costs and hampering the ability to attract able local managers because of negative perceptions on promotion possibilities.²⁰ In response, several leading Japanese firms, among which Toyota, have recently implemented global executive training systems aimed at promoting local managers to executive positions in affiliates.²¹ Clearly, attracting and motivating capable local host country managers remains a major future concern for the expansion and competitiveness of Japanese multinational firms abroad.

This paper contributed to the scarce empirical literature on the determinants of expatriation. The results on the importance of inter-firm ties within vertical business groups are consistent with the prediction of Boyacigiller (1990) that the determinants of expatriation choices are not only firm-specific, but also depend on inter-firm ties in business groups. This may not only hold specifically for Japanese firms, but could also affect human resource strategies of multinational firms from other

¹⁹ There is some emerging evidence that the strong reliance on expatriate managers by Japanese firms is indeed declining (Beamish and Inkpen, 1998).

²⁰ Several reports on Japanese firms’ operations in Asia allude to the high costs and inflexibility associated with a reliance on expatriate managers. E.g. “Sony employs color purple to motivate China plant workers”, *Nikkei Weekly*, 10 March 2003; “Japanese firms slow to promote locals”, *Nikkei Weekly*, 25 March 2002. A survey by the Japan Bank of International Cooperation found that “securing local managers” was the most important management concern for Japanese affiliates operating in China.

countries, in particular those firms that established manufacturing operations abroad mainly in response to the internationalisation of their existing industrial customers. Future research could investigate to what extent inter-firm ties impact expatriation policies in multinational firms from other countries. Also, there is a need for complementary case study evidence investigating the precise nature of inter-firm linkages affecting expatriation decisions, such as the roles of management transfers and training, information exchange, and sales relationships. A further avenue for future work would be a replication of the current analysis to more recent managerial appointment decisions to investigate to what extent Japanese multinational firms have become more responsive to the need to access local managerial talent. Finally, it has been suggested that the lack of policies to advance local managers to executive positions in overseas affiliates may negatively affect the performance of Japanese multinational firms (Beamish and Inkpen, 1998). An important contribution in the field could come from an empirical investigation of affiliate performance and the relationship with expatriation policies.

REFERENCES

- Adler, N.J., Ghadar, F. (1990), Strategic Human Resource Management; A Global Perspective, in: Pieper, R. (ed.), *Human Resource Management: An International Comparison*, De Gruyter, Berlin, 235-260.
- Baliga, B. R. & Jaeger (1985) A. M., Control Systems and Strategic Adaptation: Lessons from the Japanese Experience, *Strategic Management Journal*, 6, 115-134.
- Banai, Moshe (1995), Ethnocentric Staffing Policy in Multinational Corporations: a Self-Fulfilling Prophecy, *The International Journal of Human Resource Management*, 3, 451-471.
- Bartlett, C.A. and S. Ghoshal (2000). *Text, Cases and Readings in Cross-Border Management*. Irwin McGraw-Hill.

²¹ See Beamish and Inkpen (1998) for examples and "Global Executives Wanted at Toyota", Nikkei Weekly, 13 October 2000.

- Bartlett, Christopher A. and Sumantra Ghoshal (1991) Managing Innovation in the Transnational Corporation, in: Christopher A Bartlet, Yves Doz and Gunnar Hedlund, eds., 1991, *Managing the Global Firm*, London and New york: Routledge.
- Beamish, P. W. and A Inkpen (1998), The Decline of the Japanese Expatriate, *Journal of World Business*, 33, 33-50.
- Beechler, Schon, and John Zhuang Yang (1994), The Transfer of Japanese-Style Management to American Affiliates: Contingencies, Constraints, and Competencies, *Journal of International Business Studies*, 467-491.
- Belderbos, R.A. (1997) *Japanese Electronics Multinationals and Strategic Trade Policies*, Oxford University Press, Oxford.
- Belderbos, R.A., and Leo Sleuwaegen (1996) Japanese Firms and the Decision to Invest Abroad: Industrial Groups and Regional Core Networks, *Review of Economics and Statistics*, 78, 214-220.
- Belderbos, R. A. (1997), Giovanni Capannelli and Kyoji Fukao (2001) Backward Vertical Linkages of Foreign Manufacturing Affiliates: Evidence from Japanese Multinationals, *World Development*, 29 (1), 189-208
- Belderbos, René A, and Martin A Carree (2002) The Location of Japanese Investments in China: Agglomeration Effects, Keiretsu, and Firm Heterogeneity, forthcoming in: *Journal of the Japanese and International Economies*.
- Bird, A. (1996), Careers as Repositories of Knowledge: Considerations for Boundaryless Careers, in: Arthur, M.B. & Rousseau , D.M. (eds.), *The Boundaryless Career: a New Employment Principle for a New Organizational Era*, Oxford University Press, New York, 150-168.
- Blodgett, L.L. (1991), Partner Contributions as Predictors of Equity Share in International Joint Ventures, *Journal of International Business Studies*, 22 (1), 63-79.
- Bonache, J. , Cervino, J. (1997), Global Integration without Expatriates, *Human Resource Management Journal*, 7, 89-100.
- Boyacigiller, N. (1990), The Role of Expatriates in the Management of Interdependence, Complexity and Risk in Multinational Corporations, *Journal of International Business Studies*, 21. 357-381.
- Briscoe, D. R. (1995) *International Human Resource Management*, Prentice Hall, 1995

- Chang, S.J. (1995). 'International Expansion Strategy of Japanese Firms: Capability Building Through Sequential Entry', *Academy of Management Journal*, 38, 383-407.
- Conner, K., Prahalad, C.K. (1996), A Resource Based Theory of the Firm: Knowledge versus Opportunism, *Organization Science*, 7, 477-501.
- Delios, Andrew and Ingmar Björkman, 2000, Expatriate Staffing in Foreign Subsidiaries of Japanese Multinational Corporations in the PRC and the United States, *International Journal of Human Resource Management*, 11 (2), 278-293.
- Downes, M. Thomas, A.S. (2000), Knowledge transfer through expatriation: the U-curve approach to overseas staffing, *Journal of Managerial Issues*, 12, 131-149.
- Dyer, J.H., Nobeoka, K. (2000), Creating and Managing a High-Performance Knowledge Sharing Network: The Toyota Case, *Strategic Management Journal*, 21, 345-367.
- Edström, A., Galbraith, J.R. (1977), Transfer of Managers as a Coordination and Control Strategy in Multinational Organizations, *Administrative Science Quarterly*, 22, 248 – 263.
- Edström, A., Galbraith, J.R. (1994), Alternative Policies for International Transfer of Managers, *Management International Review*, 34, 71-82.
- Egeloff, W.G. (1988), *Organizing the Multinational Enterprise: An Information Processing Perspective*, Ballinger, Cambridge, MA.
- Eisenhardt, K. (1985), Control: Organizational and Economic Approaches, *Strategic Management Journal*, 31, 134-149.
- Finkelstein, S., & Hambrick, D.C. 1996. *Strategic leadership: top executives and their effects on organizations*, New York: West.
- Geringer, J.M., Frayne, C.A. (1990), Human Resource Management and International Joint Venture Control: a Parent Company Perspective, *Management International Review*, Special Issue, 103-120.
- Gerlach, M. (1992), *Alliance Capitalism: the social organization of Japanese Business*, Berkeley: University of California Press.
- Goto, Akira (1982) Business Groups In a Market Economy, *European Economic Review* 19, 53-70.

- Grant, R. (1996), Prospering in Dynamically-Competitive Environments: Organizational Capability as Knowledge Integration, *Organization Science*, 7, 375-387.
- Harzing, A.W.K. Managing the Multinationals (1998), An International Study of Control Mechanisms, Cheltenham: Edward Elgar.
- Harzing, A. 2001. Who's in Charge? An Empirical study of Executive Staffing Practices in Foreign Subsidiaries. *Human Resource Management*, 40 (2), 139-158.
- Head, K., J. Ries and D. Swenson (1995). 'Agglomeration Benefits and Location Choice: Evidence from Japanese Manufacturing Investments in the United States', *Journal of International Economics*, 38, 223-247.
- Horiuchi, T. (1989). The flexibility of Japanese small and medium-sized firms and their foreign direct investment, in K. Yamamuro (ed.), *Japanese investment in the United States: should we be concerned*. Society for Japanese Studies, Seattle, WA.
- Killing, J. (1983), *Strategies for Joint Venture Success*, Praeger, New York.
- Kobrin, S.J. (1988), Expatriate Reduction and Strategic Control in American Multinational Corporations, *Human Resource Management*, 27.1, 63-75.
- Kren, L., Liao, W.M. (1988), The Role of Accounting Information in the Control of Organizations: A Review of the Evidence, *Journal of Accounting Literature*, 7, 280-309.
- Kumar, S., Seth, A. (1998), The Design of Coordination and Control Mechanisms for Managing Joint Venture – Parent Relationships, *Strategic Management Journal*, 19, 579-599.
- Martin, Xavier, Will Mitchell and Anand Swaminathan (1995) Recreating and Extending Automobile Buyer-Supplier Linkages in North America, *Strategic Management Journal*, 16, 589-619.
- Martin, Xavier, Will Mitchell and Anand Swaminathan (1999) Organizational Evolution in the Interorganizational Environment: Incentives and Constraints on International Expansion Strategy, *Administrative Science Quarterly*, 43, 566-601.
- McMillan, Charles J. (1996) *The Japanese Industrial System*, Berlin and New York: De Gruyter.
- Ministry of International Trade and Industry (2000), White Paper on Foreign Direct Investment 2000, Tokyo: MITI.

- Ministry of International Trade and Industry (1996), *Kaigai Tousei Tokei Souran (Basic Survey on Foreign Direct Investment, No 6*. Tokyo: Okurashou Insatsukyoku.
- Morris, Jonathan, Max Munday, and Barry Wilkinson (1994) *Working for the Japanese: The Economic and Social Consequences of Japanese Investment in Wales*, The Athlone Press, London and Atlantic Highlands, NJ.
- Nakatani, Iwao (1984) The Economic Role of Financial Corporate Grouping, in: Masahiro Aoki, ed., *The Economic Analysis of the Japanese Firm*, (Amsterdam: North Holland, 227-258.
- Nelson, R., Winter, S. (1982), *An Evolutionary Theory of Economic Change*, Harvard University Press, Cambridge, MA.
- Nonaka, I., Takeuchi, H. (1995), *The Knowledge Creating Organization: How Japanese Companies Create the Dynamics of Innovation*, Mac Millan, New York.
- O'Donnell, S., W. (2000), Managing Foreign Affiliates: Agents of Headquarters, or an Independent Network?, *Strategic Management Journal*, 21, 525-548.
- Odagiri, Hiroyuki (1992) *Growth through Competition, Competition Through Growth: Strategic Management and the Economy in Japan*, Clarendon Press, Oxford.
- Ouchi (1980), Markets, Bureaucracies, and Clan, *Administrative Science Quarterly*, 25 (10), 129-142.
- Perlmutter, H. (1969), The Tortuous Evolution of the Multinational Corporation, *Columbia Journal of World Business*, January-February, 9-18.
- Peterson, Richard B., J. Sargent, Nancy K. Napier (1996) Corporate Expatriate HRM Policies, Internationalization, and Performance in the World's Largest MNCs, *Management International Review*, 36, 215-229.
- Pfeffer, J., Salancik, G.R. (1978), *The External Control of Organizations: A Resource Dependence Perspective*, Harper & Row, New York.
- Rao, Asha, and Keiji Hashimoto (1996) Intercultural Influence: A Study of Japanese Expatriate Managers in Canada, *Journal of International Business Studies*, 443-463.
- Richards, M. (1997), The Use of Expatriates and its Effects on the Performance of US Multinational Affiliates, *Working Paper*, Department of Management, College of Business Administration, Drexel University.

- Rodgers, Ronald A., and Jacqueline Wong, (1996) Human Factors in the Transfer of the 'Japanese Best Practice' Manufacturing System to Singapore, *The International Journal of Human Resource Management*, 7 (2), 455-488.
- Rosenzweig, P. M. and N. Nohria, N., 1994, Influences on Human Resource Management Practices in Multinational Corporations, *Journal of International Business Studies*, 229-251.
- Sako, Mari (1999), From individual skills to organizational capability in Japan, *Oxford Review of Economic Policy*, 15 (1), 114-127.
- Sako, Mari (1996) Suppliers' Associations in the Japanese Automobile Industry: Collective Action for Technology Diffusion, *Cambridge Journal of Economics*, 20 (6), 651-672.
- Scullion, H. (1991), Why Companies Prefer to Use Expatriates, *Personnel Management*, 23, 32-49.
- Sohn, J.H. (1994), Social Knowledge as a Control System: A Proposition and Evidence, *Journal of International Business Studies*, 25, 295 -325.
- Suzuki, Kazuyuki (1993) R&D Spillovers and Technology Transfer Among and Within Vertical Keiretsu Groups: Evidence from the Japanese Electrical Machinery Industry, *International Journal of Industrial Organization* 11, 573-591.
- Taylor, S., S. Beechler, and N. Napier (1996), Toward an Integrative Model of Strategic international Human Resource Management, *Academy of Management Review*, 21 (4), 959-985.
- Torbiörn, I. (1994), Operative and Strategic Use of Expatriates in New Organizations and Market Structures, *International Studies of Management and Organization*, 24, 5-17.
- Tung, R. (1984) Human Resource Planning in Japanese Multinationals: A Model for U.S. Firms?, *Journal of International Business Studies*, 139-149.
- Tung, R. L. (1982), selection and Training of US, European and Japanese multinational corporations, *California Management Review*, Fall, 57-71.
- Tung, R. L. (1988), *The New Expatriates*, Cambridge, Mass.: Ballinger.
- Wakasugi, Ryuhei, 1992, Why are Japanese Firms So Innovative in Engineering Technology?, *Research Policy*, 21 (1), 1-12.
- Wang, P., Wee, C.H., Koh, P.H. (1998), Control Mechanisms, Key Personnel Appointment, Control and Performance of Sino-Singaporean Joint Ventures, *International Business Review*, 7, 351-375.

Zajac, J. (1990), CEO Selection, Succession, Compensation and Firm Performance: A Theoretical Integration and Empirical Analysis, *Strategic Management Journal*, 11, 217-223.

Table 1. Means, Standard Deviations, and Description of Variables

Variable	Description	Mean	st.dev.
Expatriate Managing Director	Binary variable (0,1) with value 1 if the managing director of the affiliate is a parent country national	0,70	0,46
Sales to Japan ratio (SMEs)	Share of sales to Japan in total sales of the affiliate, for SMEs (parent firms with less than 500 employees in Japan)	0,08	0,22
Sales to Japan ratio (non-SMEs)	Share of sales to Japan in total sales of the affiliate, for non-SMEs	0,09	0,25
Local sales ratio	Share of host country sales in total sales of the affiliate	0,52	0,44
Affiliate experience	Number of years since the start of operations of the affiliate	9,42	7,84
Parent Prior country experience	Number of years that the parent has operated a manufacturing affiliate in the country before the establishment of the current affiliate	1,76	4,69
Equity stake of parent in the affiliate	Equity stake of the parent firm in the affiliate	0,72	0,28
Relative size of affiliate	Ratio of affiliate employees over employees of the Japanese parent firm	1,71	9,00
Vertical keiretsu affiliates in country	Number of manufacturing affiliates of the keiretsu group other than those of the parent firm in the country (in case the parent firm belongs to vertical keiretsu)	1,65	4,23
Local sales ratio * number of keiretsu affiliates	Interaction effect of local sales ratio and keiretsu manufacturing affiliates	1,01	3,58
South Korea	Dummy variable taking the value 1 if the affiliate is located in South Korea	0,10	0,30
China (PRC)	Dummy variable taking the value 1 if the affiliate is located in PRC	0,24	0,42
Hong Kong	Dummy variable taking the value 1 if the affiliate is located in Hong Kong	0,05	0,21
Malaysia	Dummy variable taking the value 1 if the affiliate is located in Malaysia	0,20	0,40
Taiwan	Dummy variable taking the value 1 if the affiliate is located in Taiwan	0,13	0,33
Philippines	Dummy variable taking the value 1 if the affiliate is located in the Philippines	0,03	0,17
Indonesia	Dummy variable taking the value 1 if the affiliate is located in Indonesia	0,05	0,21
Singapore	Dummy variable taking the value 1 if the affiliate is located in Singapore	0,11	0,31

Table 2. Logit Analysis: Determinants of the Probability of Assigning an Expatriate as Managing Director

Variable	Hypothesis: expected sign	Coefficient	Standard Error
Sales to Japan ratio (SMEs)	H1: +	-0,47	0,50
Sales to Japan ratio (non-SMEs)	H1: +	1,17	0,54 **
Local sales ratio	H2: -	-0,62	0,31 **
Affiliate experience	H3: -	-0,05	0,01 **
Parent prior country experience	H4: -	-0,06	0,02 ***
Equity stake of parent in the affiliate	H5: +	2,84	0,37 ***
Relative size of affiliate	H5: +	0,07	0,04 *
Vertical keiretsu affiliates in country	H6: -	-0,23	0,05 ***
Local sales ratio * number of keiretsu affiliates	H7: +	0,19	0,06 ***
<i>Constant and country dummies:</i>			
South Korea		-2,85	0,48 ***
China (PRC)		-2,63	0,46 ***
Hong Kong		-0,61	0,69
Malaysia		-0,42	0,49
Taiwan		-1,58	0,47 ***
Philippines		-1,18	0,72
Indonesia		-0,83	0,63
Singapore		0,38	0,56
Constant		1,46	0,58 **
Number of observations			844
Likelihood ratio Test: Chi-square (17)			314,07 ***
Pseudo R-square			0,32
Percentage of correct predictions			66

Notes: The reference country is Thailand. Note: *, **, *** = significant at the 5 and 1 percent level, respectively (two-sided tests)

Determinants of Expatriation

Appendix: Correlation Coefficients

	No	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Expatriate Managing Director	1	1,00																	
Sales to Japan ratio (SMEs)	2	0,02	1,00																
Sales to Japan ratio (non-SMEs)	3	0,13	-0,13	1,00															
Local sales ratio	4	-0,25	-0,27	-0,35	1,00														
Affiliate experience	5	-0,07	-0,08	-0,02	-0,06	1,00													
Parent prior country experience	6	-0,08	-0,07	-0,05	0,01	-0,10	1,00												
Equity stake of parent in the affiliate	7	0,40	0,05	0,08	-0,29	-0,05	-0,05	1,00											
Relative size of affiliate	8	0,08	0,03	-0,05	-0,06	-0,04	-0,05	-0,09	1,00										
Vertical keiretsu affiliates in country	9	-0,20	-0,12	0,00	0,07	-0,09	0,13	-0,14	-0,06	1,00									
Local sales ratio * number of keiretsu affiliates	10	-0,18	-0,10	-0,07	0,26	-0,14	0,07	-0,16	-0,04	0,86	1,00								
South Korea	11	-0,27	0,01	-0,04	0,17	0,15	-0,01	-0,15	-0,05	-0,11	-0,08	1,00							
China (PRC)	12	-0,25	0,05	-0,01	0,17	-0,41	-0,06	-0,14	0,00	0,18	0,25	-0,19	1,00						
Hong Kong	13	0,10	0,04	0,02	-0,06	0,07	-0,01	0,14	-0,01	-0,04	-0,05	-0,07	-0,12	1,00					
Malaysia	14	0,19	-0,01	-0,01	-0,14	-0,11	0,05	0,15	0,04	0,03	-0,03	-0,17	-0,28	-0,11	1,00				
Taiwan	15	-0,08	-0,02	0,01	0,03	0,41	-0,04	-0,03	-0,06	-0,04	-0,03	-0,13	-0,21	-0,09	-0,19	1,00			
Philippines	16	0,05	0,08	0,02	-0,09	-0,01	-0,02	0,05	-0,01	-0,07	-0,05	-0,06	-0,10	-0,04	-0,09	-0,07	1,00		
Indonesia	17	0,06	-0,05	-0,05	-0,05	-0,08	-0,02	0,00	0,12	-0,05	-0,05	-0,07	-0,12	-0,05	-0,11	-0,08	-0,04	1,00	
Singapore	18	0,16	-0,07	-0,07	-0,02	0,15	0,07	0,07	0,00	-0,01	-0,05	-0,12	-0,20	-0,08	-0,18	-0,14	-0,06	-0,08	1,00